AN ENQUIRY INTO THE MEDICINAL VIRTUES OF *BATH*-WATER, AND THE INDICATIONS of CURE, Which it anſwers,

Propoſed and begun

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PREFACE.

HAVING been desired by several of my Friends to make an Enquiry into the Virtues of the Bath-Waters, in the same Manner, and upon the same Plan, as I have already done into those of Bristol: I have for some time declined it, as believing it to be a Work of more Time than I was willing to spare, and what would cost me more Pains, than I was well able to undertake. For as it is no easy Matter, to adjust and settle the several Uses and Virtues of any Mineral Water whatsoever, so will it be more particularly difficult to do this, in regard to the Waters of Bath; because of the great Multiplicity of Cases, to which they are applicable; all which must be reduced in whole, or in part, to the same Indications of Cure, before we can consistently talk of their being benefited, by one and the same Water; and this not only as to the internal, but also as to the external Use of it, in every Particular: A Circumstance which

adds to the Difficulty, and renders a Work of this Nature, not only very extenſive, but alſo exceeding intricate and perplexed. Yet nevertheleſs, when I began to conſider, that I was looked upon by my Friends as qualified for this Work, it being well known that for ſeveral Years paſt, I had been a diligent Enquirer into the Virtues of Bath-*Water, and that I could not deny what I had frequently declared, that in my Opinion theſe Waters ſtood in need of ſome farther Explication; I choſe to comply with their Requeſt, eſpecially as I now propoſed to ſpend the greater Part of the Year at* Bath, *and it was my Duty to conſider throughly of every Obſervation I had made, both during the Time when I formerly reſided there, and ſince. I therefore reſolved, notwithſtanding the many diſcouraging Circumſtances attending it, to make a Beginning; and although the Whole of this Work taken together, might appear formidable, and beyond my Strength, yet when I conſidered, that I was at liberty to proceed, as leiſurely as I pleaſed, in my own Way, and at my own Time, I ſaw no Reaſon why I ſhould decline undertaking that which was really my Duty to ſet about; and which I could not perform better than under the Eye of the Publick, as it would be a*

Security for my purſuing the Subject with proper Application and Care.

I ſhall therefore proceed, according to the Method laid down in my late Treatiſe on Briſtol-*Water, in the following Manner. Firſt, I ſhall give a Hiſtory of the Water, from as high Antiquity, as any Thing certain can be collected, until this preſent Time; endeavouring to ſhew what has been the current Opinion of Phyſicians concerning it, what Diſeaſes it has been principally uſed and eſteemed for, at different Times, and for what it is now at this Day in Reputation; thereby attempting to give ſuch a general Idea of this Water, as may be of Service to thoſe who are not yet acquainted with its Uſe and Virtues.*

And for the better aſcertaining of ſuch Caſes, as Phyſicians may think proper to ſend here for Relief, I ſhall in the ſecond Place, enquire into the Nature and Cauſe of ſuch Diſtempers as it is found more particularly beneficial to, thereby endeavouring to find out what Indications it anſwers, how far it may be depended on in the many different Diſorders it is good for, and how far not.

And this being done, I ſhall, in the third Place, enter into an Examination of the ſeveral Properties and Qualities of this Water,

ſo far as they are diſcoverable by Experiments.

This is the Method, though not the Order, in which I propoſe to proceed: For as I find the Hiſtorical Part a Work rather of Labour, than of Science, and that ſuch, as does not ſo immediately reſpect the Buſineſs of a Phyſician, I ſhall begin with the ſecond Part, which as it treats of the Nature and Cauſe of ſuch Diſtempers as are more eſpecially benefited by the Bath-*Waters, will not only be better ſuited to the Study of my Profeſſion, but alſo be more uſeful and intereſting to the Publick. And even here, I cannot by any means undertake to go through my Subject: No, that would be a Work of too great Extent, to be attempted at one Time: And in this, I doubt not but I ſhall be excuſed by every conſiderate Reader; firſt, as this leiſurely way of proceeding will give me an Opportunity of taking a more diſtinct View of every Particular. Secondly, that if any Miſtakes ſhould be made, ſuch Errors may by this means be diſcovered and acknowledged when I come to reviſe and finiſh the Whole.*

CHAP. I.

Of Chronical Diſtempers in general.

AS the moſt ſimple and general Conſideration of the Human Body, is that of an *Hydraulic Machine*, conſiſting of Solids *containing*, and Fluids *contained:* So the uſual Way of accounting for all Diſtempers incident to it, has been from ſome preternatural Default, either of the one, or of the other.

Thoſe that think the *Fluids* chiefly to blame, are of opinion, that almoſt every Diſeaſe, is the Effect of ſome unhapy Alteration, either in the Quantity, or the Quality of the Humours.

Thoſe that ſuſpect the *Solids* to be principally in Fault, lay great Streſs upon the Tone of the Fibres, which being in their natural State of Tenſity, perform their ſeveral Functions aright; but receding from this, in either Extreme, are, as they conceive, the latent Cauſe of moſt Diſorders.

And though no one, perhaps, has been ſo wholly addicted to either of theſe two Theories, as not to be willing to make ſome ſmall Allowances to the oppoſite Side; yet has it by no means been agreed, which of the two is moſt in the right; but in different Ages, and under different Symptoms, the one or the other has been occaſionally eſpouſed, according to the reigning Philoſophy of the Times.

And yet it is very apparent, that ſo long as this Matter is left undetermined, the Practice which is built on theſe Principles, muſt be full of Uncertainties; for if it is not agreed where the Fault lies, whether

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in the *Fluids* or the *Solids*, by what Rules are we to proceed? To brace the Fibres is one Thing, to depurate the Humours is another; and if we attempt the one, when we ſhould be aiming at the other, we may make great Miſtakes; and this more eſpecially, if the Mathematicks ſhould ſtep in, and lend Demonſtration to our Philoſophy.

But ſuppoſing we could be certain when the *Fluids*, and when the *Solids* were in Fault, even then, this Way of Reaſoning would be too general and abſtracted, to anſwer the End propoſed by it: For although it may unqueſtionably appear, in this or that particular Diſorder, that the original Fault is in the Fluids, yet if this is only declared in general Terms, without ſpecifying the particular Nature of the offending Matter, it cannot point out to us any rational Method of Cure; for granting, that where the Fluids err in Quantity only, there may be ſome kind of Direction, yet when we come to conſider the ſeveral different Qualites of the Humours, which

give riſe to different Diſtempers, there is very little that can be depended upon: The *Galeniſts* make the proper Craſis of the Blood, to conſiſt in a due Temperament of the four Qualities, hot, cold, dry, moiſt. The more enlightened *Chymiſts*, will have every Evil to ariſe from ſaline Acrimonies, and Effervescencies; (though among the many innumerable Combinations of Salts, they are not agreed, which particular Kinds belong to any particular Diſtemper:) But who ſees not that both theſe different Opinions, are nothing more than the Off-ſhoots of their reſpective Philoſophy? So that till the learned World are better agreed concerning the ſpecifick Nature of morbifick Juices, ſuch our imperfect Knowledge can never be received as a *Fundamental*; add to this that the real Craſis of the Human Blood, as requiſite for Health, or productive of any particular Diſtemper, ſeems a Secret far above the Reach of Man's Diſcovery, having evaded all Reſearches, both ancient and modern; and moreover it ſeems requiſite to the underſtanding

derſtanding of the true Nature of the animal Fluids, as they are the Cauſe of Diſtempers, that we not only ſhould be acquainted with the Blood itſelf, but alſo with the particular Craſis of every Humour ſecreted from it, and their ſeveral Deviations from their natural State.

And, on the other hand, if we have recourſe to the Solids, and look upon ſome Defect in them, as the original Cauſe of Diſtempers, we are ſtill under as great Difficulties as before; for granting that the Circulation of the Fluids, depends upon the Tone of the Solids, yet it is by no means a ſettled Point, what Diſeaſes ariſe from the lax, and what from the tenſe Fibre? Both, for inſtance, may be the Cauſe of Obſtruction, and how we are to diſtinguiſh the one from the other in all Caſes, is not yet determined; and it is farther doubtful, whether ſome Parts of the Body which are called fibrous, have any Elaſticity at all, (*viz.*) the Brain; and in thoſe Parts where the Fibres are elaſtic,

the Degree of Tenſity in every Fibre is ſo different, according to its different Situation and Office, that no one Medicine can be rationally adapted to the ſtrengthening and bracing one Sort of Fibres, but what may proportionably hurt another; unleſs we can ſuppoſe that this Medicine ſhall exert itſelf only on the Part affected, and that we know how to proportion the Degree and Force of it, to every Fibre, and to every different Make of ſuch Fibre, in different Conſtitutions and Ages: And if it be objected, that bracing Medicines are often found to be of great Service in ſeveral Diſtempers, I will not diſpute the Efficacy of them, only beg Leave to obſerve, that it is poſſible we may be miſtaken as to the Manner of their Operation; and if ſo, this Way of Reaſoning will amount to nothing more, than what the Logicians call *Sophiſma non Cauſæ pro Cauſâ.*

Some, indeed, there have been in all Ages, who have not attached themſelves either

either to this or that particular Theory: If the Doctrine of Solids has not been ſufficient to ground their Practice upon, they have had recourſe to that of the Fluids, and ſo by adapting neither, have pleaſed themſelves with avoiding the Errors of both; but let them take the one, or the other, or both, it is plain that the ſame Uncertainties which belong to each, will be found in both; neither is it poſſible we ſhould build a rational Practice upon them, either ſeparately, or jointly, till ſuch time as we know whether the Fluids move the Solids, or the Solids the Fluids; which are *Agents*, which are *Patients*; how they act, how they are acted upon; and whether any thing more ſubtle than both, may not be the primary Cauſe of all their ſeveral Movements. Theſe are Queſtions deep and difficult, yet ſuch as ought to be reſolved, before we preſume to found Practice upon theſe Principles. *Hippocrates* * divides the whole Human Body into σώματα ἴσχοντα, ἐνισχόμενα, καὶ, ὁρμῶν-

* *Hippoc.* Epid. Lib. 6. Sect. 8.

ὁρμῶντα (*i. e.*) the Parts *containing*, the Parts *contained*, and the Parts *actuating*; by which it is plain, that he did not look upon the *Solids* or the *Fluids* as the firſt *Movers*, though he at the ſame time thought it neceſſary, that we ſhould underſtand the *moving* as well as the *moved* Parts. It would be thought a Piece of Preſumption in any Body to undertake to account for the Defects of any curious Machine, upon a general Notion only of mechanical Principles, without underſtanding that particular Principle, upon which ſuch Machine was built.

Something indeed has been attempted this way, by attributing all Senſation and Motion to the Nerves; but as nothing more is told us concerning theſe Nerves, than what was before taught of the Solids in general, namely, that all their ſeveral Motions and Actions depend upon the Tone of the Fibres; this adds no Knowledge: And though ſome have gone further, and ſought for the primary Cauſe

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of Motion in the *Animal Spirits* *; yet this amounts to but little, becauſe the Learned are not agreed, whether there is really any ſuch Fluid; and if this is allowed, they do not concur as to the Manner of any of its Operations; ſo that after all our Search, our boaſted Knowledge in Mechanicks, is much too ſcanty, when applied to the living Fabrick of the Human Body, and comes as far ſhort of the divine Machinery of Man, as are the Shades and Colours of his Picture; and this is no more than what we have been told from the higheſt Authority, that we are fearfully and wonderfully made, and that this Knowledge is too high for us, we cannot attain unto it.

* It were endleſs to enumerate the many different Opinions entertained by different Authors concerning the *Animal Spirits*; what Dr. *Hales* ſays, in his *Hæmaſtaticks*, p. 58. is enough to ſhew we know little or nothing about them; where ſpeaking of the Nerves, he ſays, "It is not eaſy to determine whether the "Force by which they act, is confined in Canals "within the Nerves, or acts along their Surfaces like "electrical Powers."

Leaving therefore the uncertain Gueſſes of vain Philoſophy, let us rather keep to the plain old Paths of Practice and Obſervation; always remembring, that our Reaſon is not the *Informer*, but the *Informed*; not the *Maſter*, but the *Scholar*; and that we were never intended to plan and deſign the Building, but to ſurvey and examine it, and to liſten to the Inſtruction of him that made it; and in ſo doing I truſt I ſhall be able to give a more ſatisfactory Account of Chronical Diſtempers, than any * Philoſophy has hitherto afforded us, at leaſt I ſhall have this comfortable Proverb of my Side: He that follows Nature is never out of his Way.

There

* Dr. *Sydenham*, in his Letter to Dr *Short*, publiſhed at the Beginning of his *Tractatus de Podagrâ*, addreſſes himſelf to the Doctor in the following Words:— "Te tamen Natura ad eas potius ſubtili-
"tates determinaverit, quæ e Praxi naſcuntur, quam
"ad inanes Speculationes, quæ duo haud minori in-
"tervallo a ſe invicem diſtant, quam ſapientum res
"ſeriæ et maximi momenti, a puerulorum ludo et
"crepundiis diſterminantur, et fortaſſe, niſi me fallit
"obſervatio mea, rarò in eodem ſubjecto con-
"veniunt."

There is no Truth in regard to the Human Body more apparent than this, that the *Egeſta*, ought to be in proportion to the *Ingeſta*, and that an Inequality between the Aliment taken in, and the Humours ſent forth of the Body, is the frequent Cauſe, both of acute and chronical Diſtempers; an acute one, if Nature is rouſed, and ſtruggles for a Criſis; a chronical, if ſhe effects it ἀθορυβῶς in a more gentle and natural Way. The ſeveral Accidents, which may occaſionally give riſe to ſuch Diſproportion are not before us at preſent, but that ſuch Diſparity is very common, and the natural Conſequence of almoſt every Irregularity in Life, is univerſally allowed; and the immediate Effect of this upon the *tranſudatory Lymph* is a Matter well worth our Enquiry.

The Doctrine of Lymph tranſuding through the Coats of the Veſſels in every Part of the Body, is as old as *Hippocrates*, and has been of late ſo well eſtabliſhed

by a *modern Writer* *, that there is no need of further Proof: Our preſent Purpoſe is rather to ſhew the great Importance of it, and to prove that aqueous Moiſture, of which this Lymph chiefly conſiſts, is the grand Inſtrument of Admiſſion, Diſtribution and Secretion of every Thing that goes into the Body; and that the tranſudatory Lymph is that which is principally affected, by every Error in regard to the *Ingeſta*, and that which communicates it to every Part.

I ſhall not here diſpute what Proportion of our Food is conveyed through the Lacteals, and what is abſorbed by the meſeraick Veins; in both Caſes, whatever enters the Blood, is in a liquid Form, and is carried thither by means of a large Proportion of aqueous Moiſture, without which nothing can get into, or tranſude from, the Blood-Veſſels; and as whatſoever is intimately mixed with Water, muſt impregnate

* *Abraham Kaau*,

impregnate that Water, and alter its Properties, more or leſs; this aqueous Part of our Food, muſt partake of every Fault in the firſt Paſſages, or in the Blood-Veſſels, that is, of every Error in the firſt Concoction, or in the ſecond.

But when we conſider farther, that aqueous Moiſture, is not only the Inſtrument of Admiſſion into, and Tranſudation from, the Blood-Veſſels; but alſo the Vehicle which conveys proper Supplies to the extravaſate Parts; that every Veſſel, every Membrane, every Fibre receives its natural Moiſture from it, and that no one Function of the Body, can be performed without its Help; we ſhall then conceive, not only how this tranſudatory Lymph partakes of every Evil, but alſo how it may communicate it to every Part.

And when to this we add the Influence it has upon the glandular Secretions, and conſider how they all depend upon the healthful

healthful State of this Fluid, we have the greateſt Reaſon to believe that this is the Humour principally concerned in the Production of Chronical Diſtempers; that which firſt receives the Taint, then communicates it to the Blood, and afterwards fixes it; and as this Connection between the glandular Secretions, and the tranſudatory Lymph, ſeems to be a Matter of great Conſequence, I ſhall endeavour to explain it.

All Animal Secretion may be conſidered as two-fold, and is either *porous*, or *glandular*; that which tranſpires through the Pores, is the very tranſudatory Lymph itſelf, and ſo is regulated by the proper or improper Craſis of it; it remains therefore to prove, that what is carried off by the Glands, depends alſo upon the ſame Cauſe.

As there is a certain Quantity of Solids, as well as Fluids, admitted into the Blood;

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ſo, in ſome proportion, muſt both of them be carried out: The *Pores* ſeem for the moſt part deſtined for the Exhalation of the more fluid Parts: The *Glands* for the Excretion of thoſe which are more ſolid; but as the ſolid Particles cannot be excreted but in a liquid Form, and by the Help of a large Proportion of aqueous Moiſture, it is provided that That Part of the tranſudatory Lymph, which does not reach the outward Surface of the Body and tranſpire off, ſhall be reſerved for the Supply of natural Moiſture to the inward extravaſate Parts; among which the Glands muſt have their Share, and that (as I conceive) in a very large Proportion; becauſe every Recrement that is not carried off through the Pores, muſt be ſecreted by the Glands; neither can they perform their ſeveral Functions without a conſiderable Quantity of aqueous Moiſture: For the Glands are not to be conceived as ſufficient of themſelves to ſecrete their reſpective

ſpective Juices, by means only of what is brought to them by the Arteries, but as requiring withal an additional Moiſture from without, which Moiſture is ſupplied by the tranſudatory Lymph, and by this they are irrigated and fed, as Seed is in the Ground; and that it is ſo in fact, will appear from the following Conſiderations:

Firſt, From the general Difference obſerved in the ſeveral glandular Secretions of the Human Body, ſome ſecreting ſlowly and but little, others very largely, and much quicker, and not at all in proportion to the Quantities of Blood brought to them by the Arteries.

Secondly, From the particular Difference obſerved at different Times, in the ſame Secretions. Sometimes the Glands will diſcharge a great deal, ſometimes very little, and this in perfect Health, without

any

any ſenſible Increaſe or Alteration of the arterial Blood; and this is particularly obſervable in the Urine; ſo that it has been thought impoſſible that this ſhould be the only Supply; and what ſhall we ſay of the Breaſts in Women? Here are Organs perfectly formed, Arteries bringing the Blood, and Veins carrying it off, and yet no Secretion, till ſuch Time as Nature depoſites the tranſudatory Lymph in proper Quantities, on theſe Parts, and then they flow in Abundance.

Thirdly, The Quantities ſecreted in many of the Glands, ſeem to be more than the Blood by way of the Arteries can yield, conſidering that the Veins carry off near as much as the Arteries bring; and it is very agreeable to the animal Oeconomy, to conſider the Glands as the Emunctories of ſuch excrementitious Lymph as does not perſpire off by the Pores; which is farther proved from the conſtant Hurt of the Glands when this tranſudatory

Moiſture is either deficient or redundant, and their ſeveral morbid Swellings, and Diſcharges from the ill Qualities of it.

If then this is the Caſe, and this aqueous Lymph, is not only the Inſtrument of Admiſſion and Diſtribution, but alſo that on which all the glandular Secretions in great meaſure depend, it muſt be affected by every Error as to the *Ingeſta*, and being ſo affected muſt cauſe Irregularities as to the *Egeſta*; not to mention that the *Egeſta* being diſturbed from other Cauſes, muſt reciprocally affect the tranſudatory Lymph; ſo that in every Light in which we can take it, the tranſudatory Lymph will be found to be the uſual Seat of Chronical Diſtempers, which I ſhall make appear by proceeding to a more particular Explication of them.

As Chronical Diſtempers are ſeated chiefly in thoſe Parts of the Body, where the Circulation of the Humours is moſt eaſily inter-

interrupted; ſo the moſt general and ſimple Account that has been given of them, is from *Obſtruction*, which the ſmaller Veſſels muſt be more particularly ſubject to, from any the leaſt Defect, either in the Humours paſſing, or the Veſſels through which they paſs; but as this Account is too general, and does not ſufficiently diſtinguiſh between one Chronical Diſtemper and another, in that it does not inform us where theſe minute Veſſels are, in the arterial, lymphatick, or glandular Syſtem, (which is very material for us to know, becauſe Obſtruction in each of theſe have different Conſequences;) ſo this Way of Reaſoning is not ſo very inſtructive, as may at firſt Sight be imagined: For if the Narrowneſs of the Veſſels were the only Difficulty, there would be a greater Sameneſs in Chronical Diſtempers as to the Parts affected, and as to the Cure; nor is it eaſy to conceive how Obſtructions in the ſmaller Veſſels can be the Cauſe of all this Miſchief, becauſe it is well known,

that we can tye up an Artery, or cut off a Limb, without any ſuch Conſequence; ſo that unleſs theſe Obſtructions are very general, ſo as to affect the Circulation of the whole, they are of little or no Significance, at leaſt not ſufficient to produce ſo great Diſorders. Obſtruction is indeed a very general Word, and may be applicable to the Stoppage of any Humour in any Part of the Body; but if meant of Fluids circulating within the Veſſels which contain them, does not ſeem to be the Cauſe of Chronical Diſtempers, which, if I am not miſtaken, ariſe rather from extravaſate than intravaſate Humours, and are ſeated (at leaſt in their firſt Beginnings) not *within*, but *without* the Veſſels. And it is from this latter Kind of Obſtruction, that I ſhall endeavour to account for the great Variety of them.

All Chronical Diſtempers ariſe from ſome Error, either as to the *Ingeſta*, or *Egeſta*; both which may be hurtful to

us,

us, either in Quantity, or Quality; and that either in Exceſs or Defect.

This Diſproportion firſt ſhews itſelf in the tranſudatory Lymyh, which is either loaded with ſuch Particles as are not natural to it, or robbed of ſuch as are; for as aqueous Moiſture, of which this Lymph chiefly conſiſts, is the grand Vehicle, by which every Thing is firſt conveyed into the Blood, then diſtributed through every Part of the Body, and afterwards carried out of it; it is not only the common Repoſitory of every nutritive, and excrementitious Particle, but alſo the inſtrumental Means of applying the one, and diſcharging the other.

What Diſeaſes ariſe from too great Evacuations, or Non-ingeſtion of proper nutritive Juices, and the ſeveral Alterations occaſioned thereby, in the Quality of the Humours, I have endeavoured to explain in my late Treatiſe on *Briſtol* Water.

What

What proceed chiefly from too plentiful Ingeſtion of Aliment, or Non-ſecretion of neceſſary Recrements, whereby the Body is loaded with Humours that are excrementitious, I ſhall now have occaſion to conſider.

If then the Body is overcharged, either by taking in more than it lets out, or letting out leſs than it takes in, it is plain, in this caſe, there muſt be a Superfluity; which may be either *ſimple* or *compound*. *Simple*, if the ſuperfluous Humour has no material ill Quality belonging to it; *Compound*, if it has; in both Caſes Nature will ſeek a Diſcharge of the redundant Matter, by ſome means or other; and this is ordinarily effected, either by the Increaſe of ſome of the Secretions, or by the Lodgement of it in ſome particular Part; both which will have their reſpective Benefits and Inconveniencies, according to the Condition of the Humours to be diſcharged, and the Nature of the Part affected.

And

And here let us ſtop a little, and conſider the many innumerable Evils which may ariſe from this Cauſe only, ſuppoſing there is Strength to throw out, and make an effectual Diſcharge; for theſe Humours may be depoſited, either on the outward Integuments, or on the muſcular Fleſh, or on the Membranes, or on the Ligaments, or on the Joints; all which have their reſpective Diſorders belonging to them; and thoſe, many of them very troubleſome and painful: Or, laſtly, they may fall on any of the Glands, where, though they find a freer Exit, they may occaſion great Variety of Diſorders, many of which may be attended with very fatal Conſequences.

Nor is the Place, where theſe Humours are to fall, determined always by the natural Strength, but often by external Accidents, which will ſometimes act in direct Oppoſition to it, and cauſe Humours to ſtrike inward, which might otherwiſe have

have come outwards, and as theſe Accidents are innumerable, ſo may they happen at any time, either before Nature depoſites this Superfluity, or after; and give Diſturbance accordingly. And this will account for almoſt the whole Tribe of Chronical Diſtempers, as they appear in their firſt Beginnings, and for the Dangers attending them, ſuppoſing Nature in full Strength, and able to effect a proper Criſis.

But if it ſhall happen that ſhe is not able to do this, then will ſhe either faintly attempt a ſalutary, or yield to an unſalutary Criſis: In the firſt Caſe, the Effort will be incompleat; in the ſecond, it will be dangerous; ſo that beſides the many Accidents from without, the Dangers and Difficulties from within, are numberleſs, which will haraſs and plague us, according to the different Malignity of the offending Matter, and the Nature of the Place on which it is depoſited; whilſt the glandular Syſtem being hurt more or leſs, in whole

whole, or in part, through frequent imperfect Diſcharges, or unnatural Supplies of foul Lymph, ſhall mutiply the Evil, and anſwer the Sum Total of moſt chronical Complaints. And here we ſee not only the Riſe, but alſo the Progreſs of theſe Diſtempers, how they will battle it Day after Day with the animal Strength, how they will diſpute every Inch of Ground with it, and if there is a weak Place to be found, how they will be ſure to attack it; and that it is our Part, if poſſible, to give no Advantage to ſo powerful and ſubtle an Enemy.

But, *Laſtly*, If the Foulneſs of the tranſudatory Lymph is ſuch, that not only the Glands in general, but thoſe in particular, whoſe Functions are moſt requiſite for the immediate Purpoſes of Life, ſhall not receive their proper Supplies, but inſtead of being irrigated with kindly genial Moiſture, be choak'd up

with foul unnatural Humours; then will it not be in our Power to procure any Criſis at all. But Nature will depoſite her Burthen upon the weak Part, which will be ſo far from giving Relief, that it will rather increaſe the Evil, whilſt the natural Strength being able to make but a faint and feeble Reſiſtance, opens a Paſſage for the Enemy into the Head Quarters; then the Strong-holds in which we truſted are yielded up, Diſeaſes enter,

——— *Portiſque patentibus omnes*
Accipiunt ſocios, atque Agmina conſcia jungunt.

And from this Account it appears, that the Cauſe of chronical Diſtempers is not to be ſought for, either in the Fluids, or the Solids, abſtractedly conſider'd; but in the Exceſs or Defect of the *Ingeſta* or the *Egeſta*, which alters the Craſis of the tranſudatory Lymph, and by means of this communicates the Evil to any Part, and very frequently to the glandular Syſtem.

CHAP.

CHAP. II.

Of the SCURVY.

I Do not begin with the *Scurvy*, as a Diſtemper which is in itſelf ſo immediately benefited by the *Bath* Water, but rather as it is the uſual Source and Concomitant of thoſe which are; and will not only ſerve to exemplify what has been already ſaid in the foregoing Chapter, but alſo prepare the Way for the better Explication of what is to follow; for as I am about to enquire into the Nature and Cauſe of ſuch Diſtempers as are benefited by the *Bath-Water*, I cannot well proceed to the particular Explication of them without ſome previous Account of the Scurvy, which is neceſſarily connected with, and

in ſome ſhape or other, attends upon every one of them.

By the *Scurvy*, I do not only mean that high Degree of it, which is principally ſo called, but alſo every Deviation of the Humours from their natural Craſis, into that which is irritating and acrimonious, which commonly goes under the Name of a ſcorbutical Habit or Diſpoſition, and which is the natural Reſult of every Error as to the *Ingeſta* or the *Egeſta*, in Quantity or Quality, be it either in Exceſs or Defect.

Thus, for Inſtance, if the *Ingeſta* be either defective in Quantity, or the *Egeſta* exceſſive, the Body is robbed of its natural Moiſture; whence the Blood is exalted, and the Humours become acrimonious, for want of ſomething to lower and dilute them, and ſo counteract the Miſchiefs

chiefs ariſing from its natural Heat and Motion.

On the other hand, if the *Ingeſta* are too great or the *Egeſta* too little, there will be Acrimony, though of another Kind, and with different Conſequences; not for want of a due Proportion of aqueous Moiſture, but from an Over-proportion of acrid excrementitious Particles, with which the Body will be loaded, and which will lay a Foundation for Diſtempers, very different in their Kind from thoſe proceeding from Inanition; and in both theſe Caſes, it is plain, that if the Quality of the Aliment taken in, is ſuch as increaſes Acrimony, or the Nature of the Humours let out, ſuch as does not ſufficiently ſecrete it, it muſt add to the Misfortune, and make Matters worſe. And thus we ſee how every Error in Quantity as well as Quality begets Acrimony, and how very material it is to diſtinguiſh between that which proceeds

ceeds from Inanition, and that which ariſes from Repletion, both which go under the Name of *Scurvy*, though very different both as to their Cauſes and their Cure; as alſo, whether the one or the other, proceeds from any Exceſs or Defect, in the *Ingeſta* or the *Egeſta*, or from a Complication of both. Theſe are Circumſtances well deſerving our Conſideration; and are, if I may ſo expreſs myſelf, our Card and Compaſs, in all ſcorbutical Caſes. And it is farther to be obſerved of the *Ingeſta* and *Egeſta*, that the ſeveral Irregularities of them are not only the efficient Cauſe of Acrimony, but alſo that the Degree and Force of it is regulated by a right or wrong Performance of them: Thus, for Inſtance, the Humours may be highly ſcorbutick, and yet if the Secretions are open, ſo as regularly to diſcharge a proper Proportion of the offending Matter, no material ill Conſequence ſhall follow; on the contrary, if they are ſhut up, ſo as

not

not to carry off the neceſſary Recrements, or are obſtructed by any Accident, the ſmalleſt Degree of Acrimony may have very fatal Effects; ſo that the Scurvy both in its Riſe and Progreſs greatly depends upon the Quantity and Quality, of what is taken in, and let out of the Body,

I would not here be underſtood to make the *Ingeſta* and the *Egeſta* the ſole and only Source of acrimonious Humours, becauſe it is well known that Impurities of this Kind, may enter from without, by means of vitiated or infected Air; though if we take Ingeſtion in the largeſt Senſe, ſo as to include every Thing that enters the Blood, either from within or from without, there may be no Impropriety in ſaying ſo: But ſo far as the Scurvy ariſes from common and ordinary Cauſes, ſo far as we generally find it connected with moſt chronical Diſtempers, and ſo far as I am at preſent concerned with it, it is the un-

doubted Conſequence of ſome Error as to the *Ingeſta* or *Egeſta*, and muſt be conſidered as ſuch in common Practice. And as to that high Degree of this Diſtemper, which is emphatically called *the Scurvy*, and is for the moſt part the Effect of corrupted Air; ſo far as it is ſo, it can only be cur'd by the Amendment or Change of ſuch Air, in all other Reſpects it is reducible to the ſame general Cauſes as the former.

We do not indeed pretend to underſtand the ſpecifick Nature of any Acrimony whatſoever, much leſs the ſeveral amazing Varieties of it, which may ariſe by different Accidents; but if we are acquainted with the ordinary Inlets and Outlets of it, if we underſtand its general Cauſes and Conſequences, ſurely we have what is ſufficient to anſwer our Enquiries, and ground a rational Practice upon.

It is indeed to be obſerv'd, that Acrimony, either ingeſted or retain'd, does not always ſhew itſelf under the Form of Acrimony; becauſe where natural Heat is wanting, it may be overpower'd by phlegmatic and wat'ry Humours: Thus, for Inſtance, a Hectick itſelf will ſometimes end in a Cachexy, and yet nevertheleſs it is undobtedly true, that neither the *Ingeſta* nor the *Egeſta*, can be exceſſive or deficient, without generating ſomething more or leſs hurtful to the Animal Oeconomy, which, as it is for the moſt part of a ſharp and irritating Nature, may well deſerve the Name of Acrimony; tho', ſtrictly ſpeaking, it may not always be acrimonious.

The *Scurvy* is ſo very complicated a Diſtemper, that it is in vain for me to attempt to deſcribe it in all its various Shapes; my Deſign here is only to enquire into the Nature and Cauſe of it in general, ſo far as

it is connected with other Chronical Diſtempers; that when I come to the particular Conſideration of theſe Diſtempers, I may be the better able to explain them. And therefore I ſhall ſay nothing here of the Cure of the Scurvy, or of the Virtues of *Bath* Water; only obſerve in general, that Mineral Waters ſeem more particularly calculated for the Removal of this Diſorder, as they ſupply the Body with aqueous Moiſture, much more ſubtle and permeable than common Water is, and by ſo doing rectify the Impurities of the tranſudatory Lymph.

CHAP.

CHAP. III.

Of the GOUT.

THE Gout, according to the moſt general and receiv'd Opinion of it, is nothing more than an Effort of Nature, endeavouring to throw off ſome morbifick Superfluity on the Extremities of the Joints, and ſo cauſing Inflammation and Pain, and all other its uſual Symptoms; and the Reaſon why theſe Pains are ſo very acute, as alſo the Cauſe why the Lodgment is made on theſe Parts, rather than on any other, has been deduced from the joint Conſideration of the offending Matter, and the particular Structure of the Parts affected. Some Writers will tell you, that the Humours in this Diſtemper are ex-

ceedingly ſaline, and acrimonious: Others lay the Fault on a tartareous Earth: Others, on viſcid Phlegm. One affirms, that the gouty Matter is too groſs and heavy to reach the minuter Veſſels, and is therefore depoſited on thoſe Parts which are moſt diſtant from the Heart, where the Motion of the Blood is ſloweſt, and crude Humours are moſt apt to lodge: Another, is of opinion, that it is ſo exquiſitely fine and ſubtle, that it is capable of paſſing through all the Strainers of the Body, without giving the leaſt Uneaſineſs, until it arrives at theſe Parts; and though all theſe ſeveral Opinions are inconſiſtent with each other, and deſerve the Name of random Gueſſes, rather than of rational Concluſions, yet one or other of them, together with ſome peculiar Structure of the Blood-Veſſels, has been the conſtant Refuge of thoſe, who have undertaken to account for the Cauſe of the Gout. We have been accordingly told, that the Blood-Veſſels of theſe Parts where the Gout is

principally

principally ſeated, are exceeding tenſe and ſpringy, by which they are render'd ſtraighter, and more difficult of Paſſage, than other more yielding Parts; that they are frequently compreſſed by the adjacent Bones, and withal of ſo ſmall and capillary a Make, as muſt render them very ſubject to Obſtruction; and this has been thought a Conſideration of ſo great Weight, that of two late Writers on this Subject the * one lays the principal Cauſe of this Diſtemper on the conſtitutional Straightneſs of theſe Veſſels: The † other, on a natural Rigidity coming on them upon the Decline of Life: But as they do not pretend to give any Proof of the particular Minuteneſs of theſe Veſſels, and it is univerſally allowed, that there are other Veſſels of the Body more ſubject to Obſtruction than theſe are, and more liable to be affected with old Old-age; this Way of Reaſoning will never hold, and that the Fault

* Dr. *Cheyne*. Eſſay on the true Nature of the Gout.

† Dr. *Oliver*. Eſſay on warm Bathing in gouty Caſes.

Fault cannot be in the Straightneſs of the Veſſels, will appear from the following Conſiderations:

Firſt, Becauſe the Gout is not ſo confined to the Foot, but that it often ſeizes on other Parts: Now, if the Fault was in the Veſſels, I conceive the Effect would be as fixed and ſtated as the Cauſe; where theſe ſtraight Veſſels are, there always muſt the Gout be ſeated. And though this may ſeemingly be accounted for, from the gouty Matter being more groſs at one time than another, and ſo obſtructing ſometimes larger, and ſometimes ſmaller Veſſels; yet, ſurely, where it is once fixed, it ought upon this Suppoſition to take its natural Courſe, and not fly from one Place to another, from the ſtraighter into the wider Veſſels, and ſo alternately, as the ſmalleſt Accidents ſhall determine.

Secondly,

Secondly, This Opinion is confuted not only from the Tranſition itſelf, but alſo from the Manner in which the Gout moves from one Place to another; which is ſometimes ſo ſudden, that the Relief of the Part is, as it were, inſtantaneous; and withall ſo compleat, as cannot be accounted for from obſtructed Veſſels, which recover gradually, be the Fault either in the Solids, or the Fluids.

Thirdly, The ſtriking in of this Humour, upon the Application of the ſlighteſt Repellents of the cold or aſtringent Kind, and the immediate Eaſe thereby receiv'd, ſhew plainly, that the Straightneſs of the Veſſels cannot be the Cauſe of the Diſorder; becauſe whatever Effect ſuch Application may have on the Fluids, it is acknowledg'd that they contract the Solids, and conſequently muſt increaſe the local Evil, which it is plain they do not: Nay, it is found by Experience,

Experience, to be more difficult to bring the Gout down into the Foot after ſuch Application, than it was before.

Nor have theſe very ingenious Explications of the Cauſe of the Gout, been ſo univerſally approved, but that many are inclined to think that this Diſorder is not ſeated either in the Blood, or the Blood-Veſſels, but is rather to be attributed to the Nerves; and ſo far the Advocates for this Opinion have the Advantage, that they can give a more plauſible and conſiſtent Account of every Symptom, and explain Difficulties much better this Way, than the other; but then it muſt be conſidered, that the Nerves are to be looked upon as *Chorda ſonum reddens quem vult Manus & Mens*, juſt as we think, ſo they will chink. And when the Advocates for this way of Reaſoning come to Particulars, they ſhew their Weakneſs, ſome laying the Fault on the Animal Spirits; others

on

on the Tone of the nervous Fibres, both which may be queſtioned; the one, as to its Agency; the other as to their Exiſtence: And, ſuppoſing them agreed where to lay the Blame, whether on the Solids or the Fluids, they will ſtill differ as widely as ever; the *Solidiſt* diſputing the State of the nervous fibres, whether too lax or too tenſe; the *Fluidiſt* that of the Animal Spirits, whether too agile or too languid, whether defective or redundant; ſo that, in ſhort, the Whole of this Theory amounts to nothing more, than explaining one unknown Thing by another.

I ſhall therefore ſubſcribe no farther to any of theſe prevailing Opinions, than to that general one only, which I firſt ſet out upon; which is, that the Gout is an Effort of Nature to throw off ſome morbifick Superfluity. How this Superfluity is firſt occaſioned, and in what it conſiſts, will in ſome meaſure appear, from what has been ſaid in the two foregoing Chapters.

But it will here behoove us to be a little more particular.

The *Gout* is acknowledged to be a Diſtemper ordinarily ariſing either from Repletion, or Retention, or both; the uſual Cauſes of it are Intemperance on the one hand, and want of Exerciſe on the other: Hereditary Diſpoſition, particular ill Qualities in the Food we accuſtom ourſelves to, or in the Air we breathe, may haſten its Approach; but generally it ſeizes upon us on the Turn of Life, when Eaſe and Indolence invite, when Thought and Care increaſe, and the natural Secretions begin to flag; ſo that we may eaſily account for what gives Occaſion to this Superfluity, and as eaſily tell in what it conſiſts (*viz.*) excrementitious Acrimony ingeſted or retained. Why theſe Recrements make a Lodgment on theſe tendinous Parts, will appear partly from the particular Structure, and partly from the intended Uſe of them. The Tendons of the Foot, and membra-

nous Capſula's belonging to them, are by Nature cold and exanguious, and conſequently more liable to lodge Humours, and leſs able to rid themſelves of them, when lodged, than other more warm and invigorated Parts; and when the natural Heat begins to decay, as it will upon the Decline of Life, theſe Inconveniencies increaſe: Add to this, that theſe Parts are extremely ſenſible, ſo that they cannot bear the leaſt Irritation without being greatly affected by it. Thus we obſerve in Surgery, that the leaſt Prick of a Tendon is not only attended with exquiſite Pain, but alſo very often with imminent Danger.

But we may not only argue from the Nature and Make of the affected Parts, but alſo from the intended Uſe of them, which is to move the extreme Joints, where there is no room for muſcular Fleſh, and where there is moſt need of muſcular Motion; as therefore theſe Parts

were deſigned for Motion, they will be the more apt to be affected for the want of it; and if not kept in conſtant Exerciſe, lodge Humours, which might otherwiſe tranſpire. *Labor Carnibus et Articulis convenit*, ſays *Hippocrates* *; and daily Experience convinces us of the Truth of this Obſervation.

And thus we are led to account for this Diſtemper's ſeizing on many different Parts at the ſame Time, or running from one Place to another; for as all tendinous Parts agree in this, that they are more exanguious and ſenſible, than the more fleſhy Parts, ſo the ſame Lymph which is hurtful to them in one Place, may eaſily be conceived to be ſo in another; and tho' ſome Places may be more ſubject to this Diſtemper than others, yet all ſeem liable to it, and that in the internal, as well as the external Parts.

And

* Epid. Lib. 6. Sect. 5—9.

And thus having given an Account of the Nature and Cauſe of the Gout; let us next proceed to the Cure.

The *Gout* may be conſidered, as *regular* or *irregular*, as *ſimple* or *complex*.

By the *regular Gout*, I mean that which comes regularly in the Foot; by the *irregular*, that which comes elſewhere.

By the *ſimple*, that which is ſimply ſo, without the Complication of other Diſorders; by the *complex* ſuch as has other Diſorders complicated with it.

The *regular ſimple Gout*, is, as I have before obſerved, nothing more than an Effort of Nature to throw off ſome morbifick Superfluity; and therefore if ſhe works right, and no Difficulties are apprehended, is beſt cured by the old Stoical Rule

Rule of *bear* and *forbear*. We cannot derive the Humour to a ſafer Place, we cannot carry it off ſo effectually any other way. *Malum bene poſitum non eſt movendum.* But if we apprehend, that without ſome Help, Nature may either rage too high, or flag too low: In the firſt Caſe, ſhe is to be aſſiſted by ſome gentle Evacuation, or ſpare Diet, ſuch as may leſſen the morbifick Matter, and not diminiſh the natural Strength. In the ſecond, ſhe is to be encouraged by ſome warm Stomachick, ſuch as may add Vigour to the Blood, without heating too much; to which End, as nothing conduces better than *Bath*-Water, given prudently, in ſuch proportion as is requiſite, ſo nothing will ſit better on the Stomach, nothing will ſtrengthen it more effectually, and enable the concoctive Powers to aſſiſt in the ſalutary Diſcharge of the offending Matter.

But

But as what is done in the Fit, is only for a Time, and has no laſting Effect, becauſe it does not reach the Root of the Diſeaſe, but tends only to the preſent Diſcharge of the peccant Humours; ſo the chief Buſineſs of a Phyſician, eſpecially in regular Caſes, is not ſo much to give Eaſe in the Fit, as to prevent the Return of it; and he that brags of a Cure for the Gout, becauſe he is able to relieve Pain, and take off a Fit, moſt miſerably deceives himſelf and his Patients; for if he has done it ſafely, all the Benefit is preſent Eaſe; if unſafely, as is generally the Caſe, Life itſelf is riſqued for the ſake of it.

But if Men will take the Cure of the Gout in a right Senſe, and be content with alleviating the Evil, without attempting an entire Riddance from it, I am ſo far from thinking the Gout to be the *Opprobrium Medicorum*, that I believe there is hardly

hardly any Chronical Diſtemper in which a ſkilful Phyſician may be of greater Service. Firſt, as the Gout confeſſedly requires great Care and Caution. Secondly, as our Care will not be in vain, becauſe the Danger is not ſo much in the Diſtemper itſelf, as in the Irregularity, or high Degree of it; both which it is in our Power, humanly ſpeaking, to prevent.

Now, in order to leſſen the Violence of this Diſorder, our firſt Intention muſt be, to prevent the Generation or Retention of acrimonious Impurities in the tranſudatory Lymph; which is effected, by taking in nothing that may increaſe, ſomething that may correct the Evil, and keeping open the natural Secretions. By Secretions, I mean not only thoſe that are glandular, but chiefly thoſe of the exhalatory Kind, which are highly material in themſelves, and on which the glandular Secretions depend; and there is nothing ſo effectual to this End, as conſtant Motion

and

and Exercise; the several Degrees and Manner of which, must be determined by Circumstances; I shall only observe here, that all Evacuations substituted in lieu of that procured by Exercise, tho' often very necessary, are vastly inferior to it in Effect: For though they may evacuate Quantity, they do not so certainly depurate the Juices, or, if I may so speak, they do not winnow the Chaff from the Wheat, as Exercise generally does.

As to those Things which are taken into the Body, whether by way of Meat or Drink, they deserve our particular Attention, something may be done to prevent, nothing should be ventured upon that may exasperate the Disorder: Temperance in general, and a prudent Use of such Meats as are suitable, both in Quantity and Quality to the Strength of our Digestion, should be a standing Rule with us; and as to Drink, it should be in such Proportion to our Meat, as may serve to pro-

mote, but by no means hinder, the Concoction of the more ſubſtantial Parts. In Kind, it ſhould be ſoft, milky, aqueous, not altogether without the Admixture of generous Wines and Spices; for it is to be conſidered, that though aqueous Liquors conduce towards the Correction and Exhalation of acrimonious Humours, yet if conſtantly adher'd to, or taken in too great Quantities, chill the Body, and leſſen the exhalatory Secretions, inſtead of increaſing them, in that they check the animal Heat, and ſo diſable Nature from throwing off her Recrements; the Conſequence of which is, that though we do Good in one Senſe, we do Harm in another; and whilſt we think we are mitigating the Degree of the Gout, endanger an Irregularity of it: And many there are, who have miſerably deceived themſelves with this Kind of Regimen, eſpecially if they have begun upon it late in Life, when Age and Infirmity does not admit of this Sort of Treatment. And yet notwithſtanding,

ing, if the digeſtive Faculties are good, and the Secretions tolerably open, it is very true that Temperance as to enflaming Meats and Drinks, is very neceſſary, and ought carefully to be obſerved; but as theſe two Circumſtances, in regard to the Stomach and the Secretions, are often wanting, and are indeed, for the moſt part, the fundamental Cauſe of almoſt every Difficulty that occurs, our principal Concern muſt be to keep them in order; and therefore our firſt Conſideration ſhould be, whether one, or both are in Fault, and how circumſtanced as a Cauſe, or a Conſequence. Does a bad Digeſtion cauſe a Non-Evacuation of neceſſary Recrements, or does a Non-Evacuation cauſe a bad Digeſtion? If the former, then every Thing muſt be inſiſted upon, that can contribute to a more perfect Concoction in the firſt Paſſages, and to the Conveyance of wholeſome and nutritive Juices into the Blood; if the latter, we muſt forward, as much as poſſible, the Diſtri-

bution of them through the Body, and of Conſequence the Excretion of what is proper to be ſecreted out of it. If there is a Fault in both, we muſt have a conſtant Eye upon both; and as the one depends very much upon the other, ſo qualify our Medicines as they may have Reſpect to both, leaning always to that Side, which moſt needs our Help; and ſo neceſſary it is to obſerve this, in every Medicine we give, or Evacuation we make, that I will be bold to ſay, that among all the Variety of Remedies which have ever done good in the Gout, ſimply conſidered as ſuch, the Benefit received, has therefore been receiv'd, becauſe it has aſſiſted either the Concoction or Diſtribution of Aliment, or both.

But as we do not profeſs to give Directions for the Cure of the Gout, only aim at explaining the Benefits ariſing from the Uſe of the *Bath*-Water, it may be proper to re-conſider this Diſtemper both

as

as to its Cauſe and as to its Cure, that we may the better conceive the good Effects that are to be expected from it. And firſt, I ſhall obſerve in regard to the Cauſe, that *Bath* Water prevents the Generation and Retention of acrimonious Impurities, as it ſupplies the Body with aqueous Moiſture, and ſo anſwers the Purpoſe of a Diluter; and this it does more effectually than other Water, becauſe it does not chill the Blood as that is apt to do, and ſo check the Exhalation of the tranſudatory Lymph, and is withal ſo active and permeable, as to reach the remoteſt Parts; whereby theſe good Effects extend further, even to the minuteſt Secretions, and ſo this Water not only dilutes, but alſo carries off great Quantities of acrimonious Lymph. And hence it is, that ſcorbutick Habits either from Indolence or Intemperance, who have reaſon to apprehend the Gout, have recourſe to the *Bath*-Water as the moſt likely Preſervative, whilſt thoſe who have already been

been afflicted with it, look upon it as the beſt Remedy they can take, by way of Prevention.

And it is further to be obſerved, that the *Bath*-Water not only ſerves to keep open the exhalatory Secretions, and conſequently the glandular, which depend upon them, but alſo is a great Strengthner of the firſt Paſſages, whereby thoſe who have been ſeverely handled by the Gout, meet with a deſirable Stomachick, which both helps Digeſtion, and defends the vital Parts from any Attack, which might otherwiſe be made upon them; ſo that every Benefit ariſing from an Amendment made, either in the *concoctive* or *diſtributive* Powers, is procured by *Bath*-Water, and every Indication of Cure anſwered, in a very natural and eaſy Way.

But it may be ſaid, that our Buſineſs at this Place is not ſo much with the *regular* as with the *irregular* Gout, and that not-

withſtanding the Explication I have given, of the regular Gout, I have by no means explained the Virtues of *Bath*-Water, which are chiefly ſeen in that which is irregular. But as the irregular Gout is for the moſt part the Effect of the regular ill-managed, I hope I have ſo far explained the Uſe of *Bath*-Water, as to ſhew how it may be guarded againſt; and ſhall now proceed to ſhew how ſuch Irregularity is actually remedied by it.

The many various Irregularities of the Gout, and the different Treatment proper for each, muſt be learnt from thoſe who have profeſſedly wrote upon the Subject; as to the Indications of Cure, which I am chiefly concerned with, I find all are agreed, no one doubting but that our whole Buſineſs is to remove the Diſorder from within, outwards; from the wrong Place to its right one. The Means how this is to be done, muſt be learnt from a Conſideration of what Place the Gout is fallen upon,

upon, and from what Cauſe; which, together with a Compariſon between the Strength of the Patient and of the Diſeaſe, may teach us to form a tolerable Judgment of what is requiſite to be done.

There is perhaps nothing within the whole Compaſs of Phyſick, but what may accidentally have been of Service: Sometimes Evacuations are neceſſary; ſometimes on the contrary, we are obliged to ſupport our Patients with every cordial nouriſhing Thing we can think of; ſometimes it is requiſite we ſhould deal roughly with the moſt forcing Medicines; at other Times, the very gentleſt are offenſive. In ſhort, all the Recommendations that have been given of *Vomiting*, *Bleeding*, *Purging*, or any other particular Method, are relative to the Caſe in hand, we cannot here be guided by Rule, but by Circumſtances; our Courſe of Practice cannot be dictated to us, any more than the Courſe of a Ship in the Sea; all we

have

have to do is to aim at the propoſed End of bringing the Gout into the extreme Parts, and effect it in the beſt manner we are able.

This then being the Caſe, our next Enquiry is how this End is promoted by *Bath*-Water; which may be done either directly, as it reſpects the firſt Paſſages, or indirectly as through the Strength and Vigour of theſe, it helps other affected Parts. When the Gout is irregular, and ſeizes upon the internal Parts, there is no Place ſo liable to the Attacks of it, as the firſt Paſſages; inſomuch that I queſtion whether the Gout external, is more appropriated to the Foot, than the internal is to the Stomach and Bowels; in moſt Caſes therefore, we have recourſe to this Water, as a Medicine which operates directly on the Part affected, as what will ſit eaſy on the moſt loathing Stomach, and comfort the diſeaſed Part, and by ſo doing enable it to throw off the Diſtemper from within, outwards, and fix it in

its proper Place. And in ſuch Caſes where the firſt Paſſages are not the Seat of the Diſorder, but ſome other internal Part; yet, as ſome Defect in them may firſt have given occaſion to it, the ſame good Effects may follow in this, as in the former Caſe. And if it ſhall ſo happen, that the Stomach and Bowels are not concerned in any reſpect, which is ſeldom the Caſe; yet, as the Strength of theſe is the Strength of the Man, and as the firſt Paſſages are the natural Organs, through which the Body receives its Supplies and Support, be it either of Food, or of Phyſick; the Strengthening of theſe, is the grand Means of ſtrengthening other Parts, and ſerves, tho' not in ſo immediate and direct a Manner, to anſwer the Purpoſe of amoving the Gout from the internal to the external Parts.

True it is, that neither the regular nor irregular Gout, are ſo plain and ſimple, either in their Cauſes or their Cure, as not to admit of numberleſs Varieties ariſing from different

ferent Conſtitution, Age, Sex, Manner of Life, *&c.* which may render the *Bath*-Water in ſome Caſes improper; and it is well known, that the Gout may be complicated with almoſt any Diſtemper, and that it is frequently accompanied either with a radicated Scurvy, or venereal Taint, or hypochondriacal or hyſterical Affections, and ſometimes with a Complication of theſe; but as I do not undertake to provide againſt every poſſible Caſe that may happen, I ſhall avoid entring into Difficulties, which when once I am got in, I ſee no Way of getting out again.

Having finiſhed therefore all I have to ſay, in regard to *Bath*-Water taken inwardly in Gouty Caſes, I am now to explain the Benefits ariſing from the external Uſe of it.

The external Application of the *Bath*-Water may be conſidered either as *total*, or *partial*; by total, I mean bathing the whole Body; by partial, bathing or pumping any particular Part.

The Virtues of *Bath*-Water applied to any particular Part, will in ſome meaſure appear, from the two following Obſervations: *Firſt*, That it is of ſingular Service in old Pains and Aches, where there is an Occluſion of the Pores, and a Fixation of cold phlegmatic Humours. *Secondly*, That Sprains and Relaxations of the membranous or tendinous Parts, are cured by it. From the firſt, we conclude, that it is a powerful Diſcutient: From the ſecond, that it is a great Strengthener. What then does Experience teach us, concerning the Gout? Will it either diſcuſs the Humour, or ſtrengthen the Part? Not the former, becauſe all warm Diſcutients exaſperate the Gout, and increaſe the Flux of Humours upon the Part. Not the latter, becauſe no Strengthener is proper, during the Influx of Humours; and in this Caſe if it takes Effect, will be apt to act as a Repellent; and accordingly we find, that if any one puts his Feet into *Bath*-Water, whilſt the

the Fit is upon him, he either enrages the Gout, or ſtrikes it in.

When the whole Body is bathed in *Bath*-Water, we learn its Virtues; *firſt*, from the Effect it has on ſtubborn cutaneous Foulneſſes: *Secondly*, on cold phlegmatic Obſtructions. From the one, we conclude, that it is of a very ſubtle ſearching Nature, ſo as to reach the minuteſt Pores; from the other, that it ſtirs and briſks up the Humours in every Part.

But upon Experience we find, that the Gout is ſo far from being benefited by bathing the whole Body, that it is generally made worſe, in that, as I conceive, the Exagitation of the Humours cauſed by it diſturbs Nature in her intended Criſis; the Conſequence of which is, that inſtead of a ſalutary Lodgment on the extreme Joints, you will ſometimes have a dangerous Inflammation on the Vital Parts.

We may therefore conclude in general, that Bathing in Whole, or in Part, is never proper in the Gout, during the Fit; and the ſame may be ſaid as to the near Approach of it, when Nature is about to throw off her Recrements in a natural Way, and ſo muſt not be diſturbed in her Work.

But nevertheleſs, Bathing is found to be of great Service in moſt Gouty Caſes; for though it may be hurtful in the Fit, yet during the Intervals, it is of great Uſe, in that it enlivens the Circulation, and ſo prevents the Retention of acrimonious Humours. Bathing the whole Body, opens the Pores of the Skin; ſearches and cleanſes the glandular Syſtem; promotes the Diſtribution of the tranſudatory Lymph; lengthens the Intervals, and leſſens the Degree of the Gout. But then it is to be acknowledged that this is not to be expected in all Caſes, and that great Judgment is required in the right Management of this Affair; but this does

does not affect the general Truth, only refers you to the Phyſician for Advice; and perhaps there is no one Caſe that comes to this Place, in which it is more neceſſary.

Bathing the Part, though dangerous in the Fit, may be of great Service upon the Decline of it; as it prevents the Fixation and Concretion of Gouty Matter, and ſtrengthens the Part: And for the ſame Reaſon, it is highly ſerviceable to thoſe whoſe Sinews are impair'd and crippled by ſevere Fits, and frequent Returns; only obſerving not to make too free with it, when there is any Apprehenſions of a Fit approaching.

In irregular Gouts it has ſometimes been thought proper to bathe the Part, with a view of bringing down the Gout into the Feet; and this Practice has been built upon a Notion that the *Bath* Water relaxes, and ſo diſpoſes Nature to depoſite her Humours on the bathed Part.

But

But if the *Bath*-Water, ſo applied, will ſometimes repel the Gout, when it is actually in the Foot, as it certainly will, how are we by this means to excite, and draw it down? And if lame crippled Limbs, are bathed with a Deſign to leſſen the Gouty Matter, and ſtrengthen the Part, how is it that the ſame Application is to increaſe the Influx of Humours, and weaken it? What may be done by a warm Application *ex accidenti*, I will not diſpute; but ſurely theſe Things do not hold well together, nor can I think that the relaxing Quality of the *Bath*-Water is of that Import and Significance, as we are generally made to believe; for although it muſt be allowed that warm Water is relaxing, yet ſurely it may be ſo impregnated as to have a contrary Effect, as may be ſeen in any common aſtringent Fomentation; and that this is the Caſe in *Bath*-Water appears from its wonderful Effects on Relaxations of all Kinds, either from

internal or external Cauſes, and alſo from the Effect it has on the Stomach, taken inwardly, where it is acknowledged not to relax, but to brace and ſtrengthen; and if it does not on account of its Heat, relax there, I ſee no Reaſon why it ſhould do it ſo powerfully elſewhere. A total Immerſion, may poſſibly relax more than a partial Application, becauſe of the greater Increaſe of Heat; but I ſhall venture to conclude from Experience, that the *Bath*-Water uſed externally, is by no means to be looked upon as a Relaxer, but a Bracer of the Solids.

And thus much will ſuffice for me to obſerve, concerning the Gout: All I have to ſubjoin is, that as what I have ſaid is hereafter to be reviſed and corrected, I hope my Reader will be ſo good as to excuſe any ſmall Miſtakes and Inadvertencies that may have eſcaped me for the preſent.

F I N I S.

A SHORT

ACCOUNT

Of the SUCCESS of

WARM BATHING

IN

Paralytic Diſorders.